



ATS 2021

Welcome

Trends in Online Discussions of Asthma in the US during the COVID-19 Pandemic

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Background & Objectives



DISCLOSURES

Authors are employees of Ipsos.
There are no conflicts of interest to declare for any of the listed authors.



BACKGROUND

Asthma is a topic widely discussed online by patients. With it being one of the underlying diseases that increases the risk of complications from COVID-19, we hypothesised that online discussions around asthma may have changed since the pandemic started.



OBJECTIVES

The aim of our study was to examine how topics discussed online by asthma patients differed in the time before the COVID-19 pandemic (December 2019 – February 2020) and during the pandemic (March 2020 – November 2020).



Methods & Limitations



METHODS

Data were collected in December 2020 using social listening tools provided by Synthesio, an Ipsos company, to aggregate all online mentions of the word “asthma” across social media platforms, excluding retweets, from December 2019 until November 2020 in the US. Topics most associated with the word “asthma” were tracked over time.



LIMITATIONS

Synthesio is an AI-based platform that provides functionality for gathering relevant content across social media and the web. The ‘Noise Reducer’ feature was employed in this analysis to remove irrelevant mentions from the data-set. However, the feature is constantly under review to improve output and therefore results of analysis may vary slightly between the two different time periods.



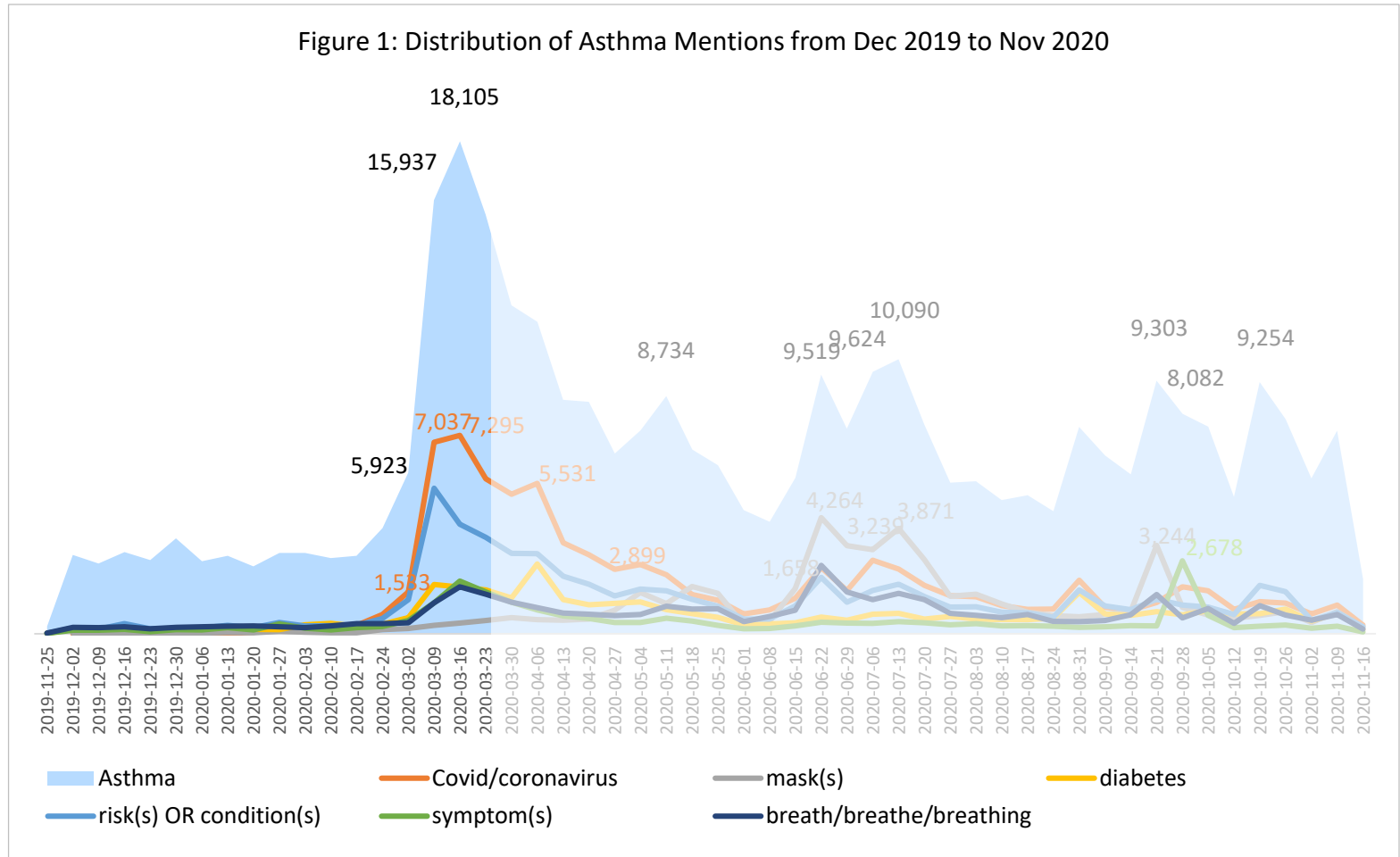
Results (1)

From Dec 2019 to Feb 2020, there were a total of 38.1K mentions of “asthma”, with no specific topic particularly associated with the keyword.

“Asthma” mentions increased by 53% in the first week of March 2020. The trend continued for three weeks and the highest traction was recorded in the third week of March at 18.1K mentions. During this increase, 40% of the “asthma” mentions were associated with the keywords “coronavirus/COVID-19”, higher than the average number of mentions associated with other topics.

The number of mentions of “asthma” together with “coronavirus/COVID-19” increased 359%, from 1.5K in the first week of March 2020, to 7K in the second week.

Figure 1: Distribution of Asthma Mentions from Dec 2019 to Nov 2020



Source: Ipsos 2021

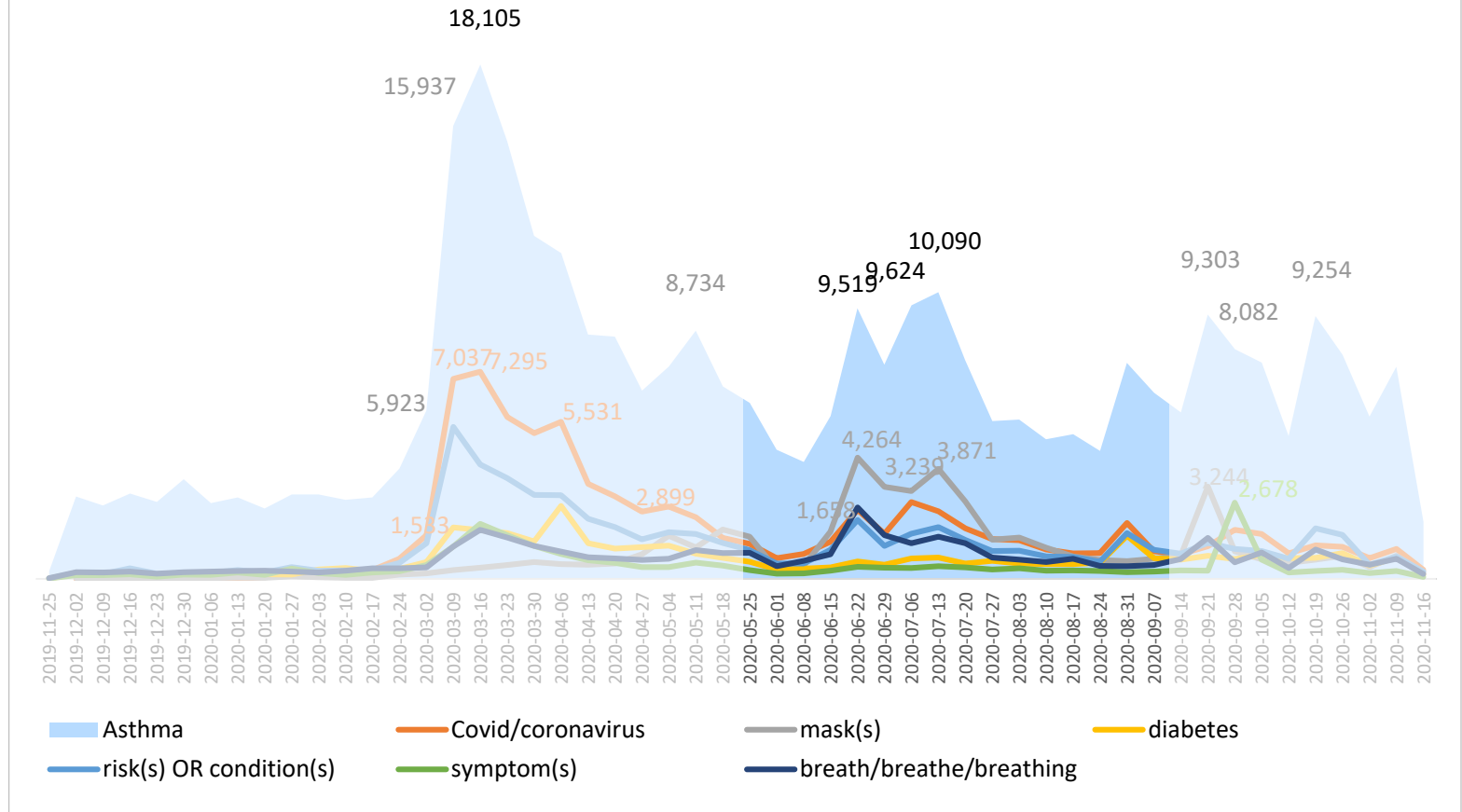
Results (2)

From June 2020 to August 2020, mentions of “asthma” were lower than in the preceding three months, but several spikes occurred throughout June and July 2020 (fourth week of June, 9.5K; first and second week of July, 9.6K and 10K)

The increased traction was found to be associated with an increase in mentions of the word “mask”. On the fourth week of June, the number of mentions of “asthma + mask” increased by 157% compared to the previous week (1.7K to 4.3K)

“Mask” was the keyword most associated with “asthma” for five weeks in a row, before decreasing over time

Figure 1: Distribution of Asthma Mentions from Dec 2019 to Nov 2020



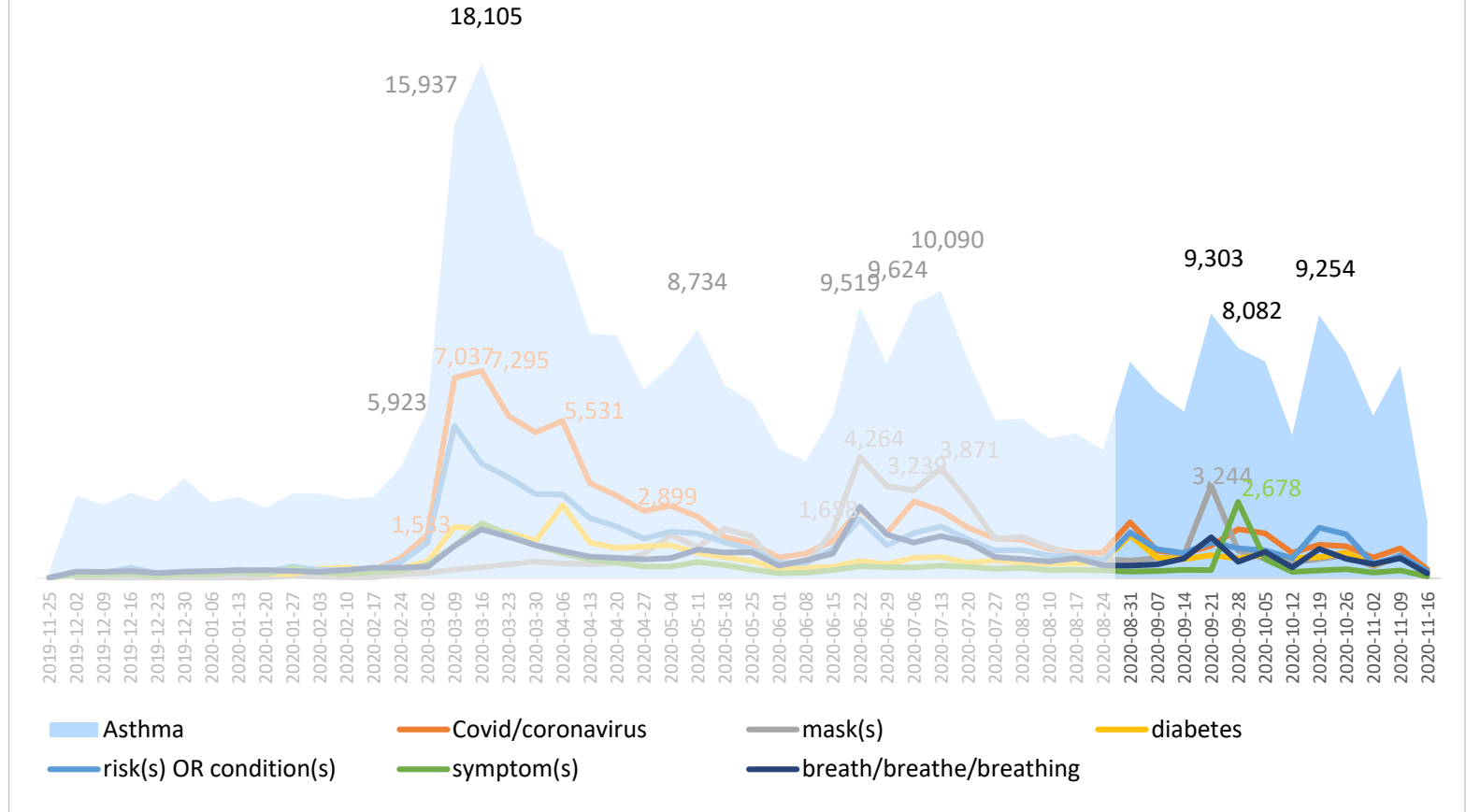
Source: Ipsos 2021

Results (3)

The number of “asthma” mentions from Sep 2020 to Nov 2020 continued to decline, but remained higher than pre-pandemic levels.

A small peak is found during the third and fourth weeks of September 2020, associating “asthma” with “mask” (3.2K mentions) and “symptom(s)” (2.7K mentions).

Figure 1: Distribution of Asthma Mentions from Dec 2019 to Nov 2020



Source: Ipsos 2021

Results (4)

Figure 2: Top words associated with asthma mentions on social media, from March 2020 to August 2020



Source: Ipsos 2021

Figure 3. Quotes from asthma patients about their views on wearing a mask.



I have copd and asthma and no problems wearing a mask when shopping, so I'm pretty jaded on the subject.

I have asthma. Two of my friends have CPPD. We're old & medically high risk. You can bet your ass we wear masks when we have to go out, even though they aren't always comfortable to breathe in. A ventilator would be much worse.



Mask drop O2 sats, make me feel dizzy and unsteady, and I feel constantly out of breath. As much as I understand where you are coming from, those with asthma, like me, note the mask harms me more than it helps others.

Long term Mask wearing causes pleurisy and other bacterial infections due to rebreathing your own CO2. Not to mention the anxiety for those with asthma or other illness when forced to wear them! Stop the madness!!

Conclusion

Online discussions of asthma increased dramatically at the onset of the COVID-19 pandemic and continued to remain high.

Initially, “asthma” was most associated with the keywords “coronavirus/COVID-19” in online discussions by patients.

In June 2020, discussions about asthma changed to focus on the topic of “masks”. The sentiment around these discussions was mixed, with views both for and against masks being expressed by patients.